



ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

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Sent via Email

September 30, 2021

Ms. Pamela L. Langston Scully, P.E.
United States EPA Region IV
61 Forsyth Street, Atlanta GA 30303

RE: Comments on Pre-Final (95%)
Remedial Design Basis of Design
Report
LCP Chemical Site, Brunswick, GA
Operable Unit 1

Dear Ms. Scully:

The Georgia Environmental Protection Division (EPD) has reviewed the Pre-Final (95%) Remedial Design Basis of Design Report, dated August 2021. Based on our review of the information provided in the above-referenced document, EPD has the following comments:

Pre-Final (95%) Remedial Design Basis of Design Report

Section 1.1 Site Description and Background

In the first paragraph, add the jailhouse as being a facility that is near the property. Furthermore, in the second paragraph, third sentence, the statement “a power plant operated by Georgia Power from the 1030s to the 1950s” appears to be incorrect and should be 1930s to the 1950s, please reconcile.

Section 1.2 Remedial Design Process

Please clarify or provide additional details in the first sentence which states, “the remedial design process involves an iterative, value engineering-based approach that considers the effectiveness, cost, and construction logistics.”

Section 2.1.5.4: Elutriate Water Testing

Please provide a reference regarding the standard procedures for obtaining elutriate samples from dredge materials.

Section 2.2.1: Infrastructure

In the statement, “The groundwater injection infrastructure and a groundwater wellfield to the south support upland remediation activities”, please clarify that this refers to the infiltration galleries rather than the recently removed injection wells.

Section 4.1 Design Assumptions

In the second to last bullet, the statement “the addition of stabilization agents may be necessary for dredged sediments to meet disposal requirements”, please provide some examples of stabilization agents that may be used or reference where this information can be found in the report.

Section 6.2: Materials and Borrow Sources

The frequency provided in the following statement “Chemical and geotechnical testing will be completed at a frequency of 1 sample per 2,500 tons of imported fill sand delivered to the Site”, appears to be low, EPD recommends a frequency of 1 sample per 500 tons of imported fill sand.

Section 8.1.3: Backfill and Thin Cover Materials

Please discuss if there is a specification for topsoil, which was previously discussed for restoration areas.

Section 8.1.3, Table 8-1: Backfill Gradation Requirements

Please correct Table 8-1 as headings are incorrect. The left column is labeled “Operable Unit” and appears to be sieve size, and the right column is labeled “Feature” and appears to be % passing.

Section 9.2.4: Air Quality Monitoring

Will PM_{2.5} monitoring for particulate matter be required as well?

Section 11: Permit Equivalency

In the third sentence of the third paragraph, address requirements of the Georgia Code for Oil and Hazardous Material Spills and Releases as referenced in 12-14-1. In the fourth sentence of the third paragraph, the correct citation is the 391-2-3 Georgia Coastal Marshlands Protection Act (CMPA), not wetlands.

Appendix B – Technical Specifications

Section 01 11 00, 1.4.D: Site Description

The Site Description section discusses “air sparge well points” associated with upland environmental investigation and remediation activities throughout OU-3; haven’t most of these been removed/abandoned?

Section 01 57 13, 3.4.F: Provisions For Erosion and Sediment Control During Construction

The last sentence states “Any release of oil or hazardous materials (as defined by State of Georgia, OCGA Section 12-8-60, “Georgia Hazardous Waste Management Act of 1990,” as amended) caused by the Contractor are the full responsibility of the Contractor.” Should the citation here be 12-14-1, Oil or Hazardous Spills or Releases?

Section 31 05 13, 3.2.C.1: Material Testing Requirements and Table 3

Referencing Section 6.2 Materials and Borrow Sources of the main report, “chemical and geotechnical testing is stated to be completed at a frequency of 1 sample per 2,500 tons of imported fill sand delivered to the Site”. EPD recommends the frequency of 1 sample per 500 tons of imported fill sand delivered to the Site, as the suggested frequency of 1 sample per 2,500 tons seems low. Furthermore, provide an explanation as to why is “Backfill” and “TLC” are not analyzed for pH.

Section 31 23 00, 2.1.A: Unsuitable Site Materials

The following section specifies mercury and lead, but PAHs and PCBs are not discussed; please reconcile.

Appendix D – 2018 Tide Measurements

Adjust graphical depiction for the Actual vs. Predicted Tide Gauge Data for the date range of 2/24/2018 -9/12/2018, to be consistent with the other graphs presented in the document. Furthermore, if possible, depict the 3 tidal zone locations (headwater/middle/lower zone) on the graphs.

Appendix I – Long Term Monitoring Plan

Section 2.3.2: Benthic Community Assessment

The Responsible Party (RP) states “*Although considered, comparison to reference locations poses considerable challenges. As USEPA recognizes, multiple factors beyond contaminant concentrations impact benthic communities. These factors include particle size, organic carbon content, habitat, elevation, and tidal position within the system (USEPA 2015). Therefore, reference locations will not be sampled*”. EPD concurs with the RP’s statement concerning the uncertainties surrounding reference areas and notes the EPA *Region 4 Ecological Risk Assessment Supplemental Guidance [R4ERA]*¹ states “*comparison of biological community metrics between the site and reference areas should not be considered a primary or robust line of evidence with a high degree of confidence*”. However, RAO 4 indicates risks to benthic organisms should result in benthic communities “*with diversity and structure comparable to that in appropriate reference areas*” (emphasis added). Though EPD concurs with the methodology proposed in the LTMP, the RP should consult EPA Region 4 to

¹ [R4ERA] = United States, Environmental Protection Agency, Scientific Support Section Superfund Division. (2018, March). *Region 4 Ecological Risk Assessment Supplemental Guidance*

ensure that the proposed methodology will not contradict the intent of RAO 4. EPD will concur with EPA Region 4 as it pertains to the methodology used for benthic community assessment in the thin layer cover area.

Section 3.3.1: Water Sampling

It is recommended that a minimum of 12 surface water samples at appropriate sampling locations (the same locations used in 2012 *Remedial Investigation Report Operable Unit One – Estuary* [RI]² is appropriate) should be collected according to the most current Surface Water Sampling protocol of EPA Region 4's Field Branches Quality System and Technical Procedures³. Both filtered (dissolved) and unfiltered (total) samples should be collected. It is recommended that samples be taken every 6 months following remedy completion to account for temporal variability.

Appendix G – Construction Quality Assurance Plan

Standard Operating Procedure (SOP) 06 – Equipment Cleaning and Decontamination

In Section 6: Procedures for Decontamination of Equipment of SOP 06, the document outlines the following steps that will be used to decontaminate supporting equipment such as boats, lines, and ropes that are not in direct contact with samples or sediment:

1. Equipment will be rinsed with ambient water onboard the boat
2. Rinse water will not be contained
3. Incidentally spilled sediment on the decks will be washed overboard, if possible, otherwise spilled sediment will be contained and disposed of as IDW.

Please clarify or provide additional information supporting whether ambient water is clean enough to use and sufficient to decontaminate equipment and not further contaminate and cross-contaminate other supplies and objects onboard. Specify how rinse water is going to be handled and properly managed if it will not be contained. Furthermore, please clarify what specifically categorizes an “incidentally spilled sediment” and “spilled sediment”. Provide a discussion on why “spilled sediment” is disposed of as IDW and “incidentally spilled sediment” is not. Can both types of sediment be disposed as IDW?

Additionally, steps are outlined that will be used to decontaminate sediment sampling equipment that will be lowered through the water column, such as vibracore sampler, piston sampler, direct-push sampler, and surface grab samplers. In the numbered items 1, 2, 4 and 5, as mentioned above, please clarify or provide additional information supporting that ambient water is clean enough to use and sufficient to decontaminate equipment and not further contaminate and cross-contaminate other supplies and objects onboard.

² Link to the 2012 [RI] - <https://semspub.epa.gov/work/04/10922973.pdf>

³ The most current surface water sampling protocol is SESDPROC-201-R4 and can be found here: <https://www.epa.gov/quality/surface-water-sampling>

Appendix H – Transportation and Offsite Disposal Plan (TODP)

Section 4.1: Hazardous Waste

As discussed in this TODP, the proposed route was selected to minimize impacts to affected communities, and all truck drivers will be instructed to use the proposed route. Please provide additional information on plans of action in the event of a roadblock or mandatory detour: there should be considerations and instructions for truck drivers to deviate from the proposed route if unforeseen circumstances arise.

Appendix K – Operation and Maintenance Plan

Section 1.2: Summary of Planned Remedial Action

The last bullet states, “placement of approximately 9,000 CY of thin cover in nine individual placement areas (including 3 inches of over-placement allowance)”. Other areas of the report such as Appendix G Section 1.2 and Appendix L Section 2.3, provide the statement “placement of approximately 10,000 to 14,000 CY of thin cover in nine individual placement areas (including 3 inches of over-placement allowance).” Please reconcile this inconsistency in the appendices and/or main body of report, where applicable.

Section 2.2: Scope

This section states that O&M will be conducted for a period of 5 years, but please provide a discussion if this timeline will be extended if potential areas of deficiencies are noted within the restoration area.

If you have any questions or need further assistance, please contact Cherona Levy or Thanh Vo. EPD is available for a meeting to go over the comments of the Pre-Final (95%) Remedial Design Basis of Design Report prior to the final submittal.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim McNamara", with a stylized flourish at the end.

Jim McNamara
Program Manager
Hazardous Waste Corrective Action
Program, Land Protection Branch